

C l a i m s

1. Method for filtering fluids, one input (22) for the unfiltered material and one output (24) for the filtrate as well as a plurality of stackable frame parts (16) being provided, especially in the form of filtrate plates (26) and filter frames (28), the respective filter frame (28) bordering the filtrate space (30) for accommodating a forming filtrate cake, which on its side facing the next frame part (16) in the stack is sealed by a laminar filter (32), and the filtrate space (30) with the filter cake which can be accommodated being bordered on its side opposite the laminar filter (32) by another filter medium (34), characterized in that another fluid, especially in the form of a washing liquid, is fed through this other filter medium (34), which fluid after flowing through the filter cake and the bordering laminar filter (32) leaves the device by way of its output (24).
2. The process as claimed in claim 1, wherein the laminar filter (32) is formed from a deep-bed filter medium and the other filter medium (34) is formed by a filter cloth (46) or likewise from a deep-bed filter medium.
3. The process as claimed in claim 1 or 2, wherein a compressive force is applied to the other filter medium (34) such that the filter cake is pressed in the direction of the laminar filter (32).
4. The process as claimed in one of claims 1 to 3, wherein to apply the compressive force to the other filter medium (34) a membrane (42) is used which can be exposed to a pressurized medium, especially in the form of a pressurized gas or a pressurized fluid, and which is a component of a membrane plate (44) as another frame part (16).
5. The process as claimed in one of claims 1 to 4, wherein the laminar filter (32) and the other filter medium (34) are clamped between the plate-like frame parts (16), and wherein they leave

uncovered the channels of the unfiltered material and filtrate (36; 38, 40) which are connected to the input (22) and output (24).

6. The process as claimed in claim 5, wherein the other medium, especially in the form of the washing liquid, is supplied and drained by way of the filtrate channels (38, 40) and/or separate channels (56) in the frame parts (16).
7. Device for implementing a process as claimed in one of claims 1 to 7, for filtering fluids one input (22) for the unfiltered material and one output (24) for the filtrate as well as a plurality of stackable frame parts (16) being provided, especially in the form of filtrate plates (26) and filter frames (28), the respective filter frame (28) bordering the filtrate space (30) for accommodating a forming filtrate cake, which on its side facing the next frame part (16) in the stack is sealed by a laminar filter (32), and the filtrate space (30) with the filter cake which can be accommodated being bordered on its side opposite the laminar filter (32) by another filter medium (34), wherein another fluid, especially in the form of a washing liquid, is fed through this other filter medium (34), which fluid after flowing through the filter cake and the bordering laminar filter (32) leaves the device by way of its output (24).